

Manufacturer: **HOWARD JOHNSON'S ENTERPRISES, INC.**
700 W. Virginia Street, #222
Milwaukee, WI 53204-1548
Emergency Phone: (414) 276-4656

**MATERIAL SAFETY
DATA SHEET**

**** SECTION 1: PRODUCT IDENTIFICATION ****

Product Name: Howard Johnson's Enterprises, Inc. BELOW ZERO / ZERO DUST
Chemical Name: Magnesium chloride hexahydrate
Shipping Information: Not regulated by US DOT for all modes of transportation within the US.

**** SECTION 2: HAZARDOUS INGREDIENTS ****

<u>Hazardous Ingredients</u>	<u>CAS Registry Number</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>SARA 313 Reportable</u>
Magnesium chloride hexahydrate	7791-18-6	not established	not established	no

**** SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES ****

Physical Form:	Crystalline solid	Bulk Density:	approx 86 pounds/cubic foot
pH:	Not applicable	Refractive Index:	Not applicable
Boiling Point:	Decomposes	Freezing Point:	Not applicable
Solubility in Water:	Soluble	Viscosity:	Free-flowing crystalline solid
Vapor Pressure:	Not determined	Vapor Density:	Not determined
% Volatile:	Not determined	Evaporation Rate:	Not determined
Appearance & Odor:	White to off-white crystals, odorless.		

**** SECTION 4: FIRE AND EXPLOSION HAZARD DATA ****

Flash Point (°F):	None - not flammable	Flash Point Method:	Not applicable
Autoignition Temp (°F):	Not applicable	Burning Rate:	Not applicable
Explosive Limits:	Upper Limit (UEL): Not applicable	Lower Limit (LEL):	Not applicable

Extinguishing Media: Water, carbon dioxide, dry chemical or foam.
Special Fire Fighting Procedures: None.
Unusual Fire or Explosion Hazards: None.

**** SECTION 5: HEALTH HAZARD DATA ****

Primary Routes of Entry: Inhalation, ingestion, skin contact
Signs and Symptoms of Over-Exposure:
- Eye Contact: Acute: Slight irritation, may cause transient corneal injury. Chronic: None reported.
- Skin Contact: Acute: May cause irritation. Chronic: None reported.
- Inhalation: Acute: Dust may be irritating but not likely to cause injury. Chronic: None reported.
- Ingestion: Acute: Possible nausea and vomiting. Chronic: None reported.

EMERGENCY FIRST AID PROCEDURES:

- Eye Contact: Hold eyelids open and flush eyes with large amounts of water.
- Skin Contact: Wash skin with soap and water.
- Inhalation: Remove person to fresh air.
- Ingestion: Low toxicity.

Medical Conditions Aggravated by Exposure: Existing skin irritation, cuts or scrapes may be aggravated by contact.

Target Organs: None identified.

Carcinogens: Not listed as a carcinogen.

****** SECTION 6: REACTIVITY DATA ******

Stability: Stable

Hazardous Polymerization: Will not occur

Chemical Incompatibilities: Solution can be corrosive to some metals.

Conditions to avoid: None.

Hazardous Decomposition Products: Hydrogen chloride when heated.

****** SECTION 7: ACCIDENTAL RELEASE PROCEDURES ******

Large Spill or Leak Procedures: No special precautions needed. Sweep or scoop up spilled material and place in a closed, labeled container for use.

Small Spill or Leak Procedures: Sweep up spilled material for use according to label directions.

Waste Disposal Methods: Consult state or local environmental agency for disposal of waste from a spill or leak.

****** SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION ******

Engineering Controls - Ventilation: This product is designed for outdoor use only, and ventilation is not normally required. Local exhaust may be necessary when handling this product in an enclosed area.

Administrative Controls: Follow all precautions and directions for use on the product label.

Protective Clothing/Equipment: Avoid contact with eyes, skin or clothing. Wash thoroughly after handling.

Respiratory Protection: For normal handling and use conditions, a respirator is not required. For excessively dusty conditions, use a respirator approved for pesticides by MSHA/NIOSH. See OSHA regulations in 29CFR 1910.134 before using any respirator or dust mask.

Eye Protection: Good safety practices suggest the use of goggles to prevent contact with eyes.

Hand Protection: Good safety practices suggest the use of rubber, leather or canvas gloves.

Skin Protection: Wear long-sleeved shirt and long trousers to prevent contact with skin.

Safety Stations: Clean water should be available to flush eyes and/or skin in case of accidental contact.

****** SECTION 9: HANDLING AND STORAGE PRECAUTIONS ******

Handling Precautions: Do not take internally. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling.

Storage Requirements: Keep out of reach of children. Material is deliquescent, and so may cake on exposure to moisture and long term storage. Keep containers tightly closed.

Update: 9/2/1997 by: Thomas J. Schmit, Regulatory Compliance Manager

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